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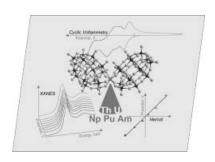
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COVER PICTURE

The cover picture shows the multi-faceted approach required to unravel the complicated electrochemistry presented by Wells-Dawson coordinated actinide (An) ions, $[An(\alpha-2 P_2W_{17}O_{61})_2^{n-}$ (An = Th, U, Np, Pu, Am). These An-polyoxometalate (POM) clusters contain two redox centers: the central An ion (magenta), except Th^{4+} , and the ligands, (α -2-P₂W₁₇O₆₁)¹⁰⁻, for which P is orange, W is black, and O is teal blue. The formal potentials of the An ions are extracted by in situ XANES (X-ray absorption near edge structure) spectroelectrochemistry, using the Nernst formalism. This approach provides a unique avenue to quantifying the An redox response, because the multi-redox active centers, together with the deep blue color of the ligands upon reduction, exclude more standard experiments. The Nernst approach to XANES data provides information about the electronic influence of POM complexation, which is of fundamental interest as related to correlated electron behavior and of practical significance to separations science in nuclear waste processing. Details are presented in the article by M.-H. Chiang, L. Soderholm and M. R. Antonio on p. 2929 ff.



MICROREVIEW Contents

2901 S. B. Duckett,* D. Blazina

The Study of Inorganic Systems by NMR Spectroscopy in Conjunction with Parahydrogen-Induced Polarisation

Keywords: NMR spectroscopy / Parahydrogen / Iridium / Rhodium / Ruthenium

